## Miscellaneous Notes

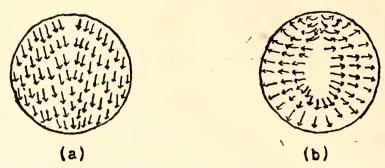
## 1. 'SCALP' OF THE ABOMINABLE SNOWMAN

(With three text-figures)

In the Journal (Vol. 52, pp. 594-598) we reviewed the evidence for the existence of the yeti or Abominable Snowman and referred in particular to the 'scalp' at the Pangboche Monastery in north Nepal. A hair from the 'scalp' was reported upon by Dr. L. A. Hausman of New Jersey, U.S.A. and, though it was not possible to match it with any other animal hair immediately available, Dr. Hausman said that it was artificially coloured and that the photograph of the 'scalp' suggested that it was a moulded and sewed artifact.

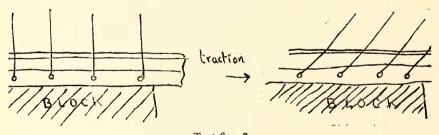
Subsequently, Dr. Bernard Heuvelmans in ON THE TRACK OF UNKNOWN ANIMALS (London, 1958) considered the evidence at length; he came to the conclusion that the *yeti* is a giant biped anthropoid hitherto unknown to science and named it *Dinanthropoides nivalis*. Regarding the 'scalp' he stated that the hair tracks on it were arranged in a pattern which made it impossible that it could have been obtained from any known quadruped. A second specimen from the Khumjung lamasery, not far away, was found to be similar, while a third one discovered at Namche bazar appeared to be a fake.

Late in 1960 Sir Edmund Hillary, the leader of another expedition into the Everest area in search of the Snowman, was able to borrow the 'scalp' at Khumjung and took it to Dr. Heuvelmans for his examination. Dr. Heuvelmans in a recent letter to the Society communicates a change of opinion. His letter will be easier to understand if we give the reasons for his former opinion, namely that 'on a hoofed mammal's back the hairs all point towards the hindquarters, parallel to the median line in what is technically called 'the primitive cranio-caudal line' [Text-fig. 1 (a)], whereas 'the hairs in the alleged snowman scalps begin parallel to the median line in what is thought to be the forehead, soon turn at right angles to it and remain at an angle until the nape of the neck where they return to this original parallel direction' [Text-fig. 1 (b)]. Dr. Heuvelmans writes: 'When the so-called "scalp" was shown to me in Paris by Sir Edmund Hillary I was struck by the appearance of



Text-fig. 1. The arrangement of hair-tracts on (a) a quadruped's back; (b) the supposed snowman's scalp.

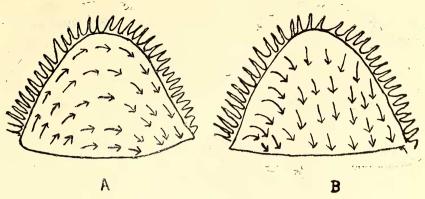
the fur and especially of the median erected crest of hairs, which reminded me of the mane of a Serow. But I could not understand how this relic could have been made from the skin of the neck or shoulder of the Serow. I explained my doubts to my friend and fellow zoologist Ivan T. Sanderson from New York, who demonstrated that when a piece of skin is exaggeratedly stretched on a milliner's block there occurs a sort of shift of the various layers of



Text-fig. 2

the skin, which modifies completely the original inclination of the hairs. The lower layer having a tendency to adhere to the block, the whole skin is distorted and the hairs become inclined towards the direction of the traction (Text-fig. 2). So the original hair-tracks (Text-fig. 3, A) become a pattern, which is exactly the one found on the head of a tall primate (Text-fig. 3, B).

'When I understood this it remained to be seen whether my first intuition about the identity of the animal whose skin had been used to make the "scalp" was correct. There was no skin of a southern Serow in the Paris Museum, but I found one in the Brussels Institute, not exactly from the Nepalese subspecies (Capricornis sumatrensis thar Hodgson) but from the same species, the original Sumatran one. I checked the hairs of this Serow against the hairs of the Khumjung



Text-fig. 3

scalp (given to me by Sir Edmund) and against the hairs of the Pangboche scalp I already had. They are identical. It should be stressed that Professor Teizo Ogawa (Dept. of Anatomy, University of Tokyo) who studied microscopically the hairs from the various scalps from Pangboche, Khumjung, and Namche bazar, has demonstrated that they all come from the same kind of animal.'

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**EDITORS** 

## 2. 'OCCURRENCE OF THE SEA COW, HALICORE DUGONG (ERXL.), OFF THE SAURASHTRA COAST'1

A recent note by Mani (1960) which appeared under the above title calls for some comments.

1. The occurrence of a dead and floating dugong in the sea noticed near Kalyan lighthouse on 17 July 1959 is a rare sight indeed, and to my knowledge this appears to be the first such record. The natural tendency of many of the marine mammals is to sink when they are killed and that such was not the case with the above specimen, in spite of its relative freshness, is interesting. The cause of death, whether due to injury or excessive infestation from intestinal

<sup>&</sup>lt;sup>1</sup> Published with the permission of the Chief Research Officer, Central Marine Fisheries Research Station, Mandapam Camp.